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**Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/184,878 11/03/98 OHNISHI

M 981331

MM92/0131  
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EXAMINER

FEILD, L

ART UNIT

PAPER NUMBER

2835

DATE MAILED:

01/31/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/184,878

Applicant  
Ohnishi et al.

Examiner  
Lynn D. Feild

Group Art Unit  
2835



☒ Responsive to communication(s) filed on Nov 14, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1, 2, and 4-31 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☒ Claim(s) 10-13, 14/10, 14/12, 15/10, 15/12, 16/10, 16/12, 17/10, 17/12, 22, 23, 31/22 is/are allowed.

☒ Claim(s) 1, 2, 4-6, 7/5, 6, 8/5, 6, 9/5, 6, 14-17/1, 4, 5, 6, 18-21, 24-29, 30/5, 6, 31/21 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 13

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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### DETAILED ACTION

The request filed on November 14, 2000 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/184878 is acceptable and a CPA has been established. An action on the CPA follows.

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 5, 6, 7/5, 7/6, 8/5, 8/6, 9/5, 9/6, 15/5, 15/6, 20, 21, 30/5, 30/6 and 31/21 are rejected under 35 U.S.C. 102(b) as being anticipated by *Hager et al.* The disk drive vibration and shock isolation system of *Hager et al.* includes a disk unit **12**, a plurality of small vibration/shock absorbing members **64**, **68** between said disk unit and the bottom and side surfaces of a disk unit accommodating part **14**, all of which is depicted in Fig. 4 and is inside a housing described at column 2, line 61. In addition, said members are composed of various types of materials with differing vibration/shock absorbing characteristics, as described at column 4, lines 3-4 (noting SORBOTHANE brand elastomer of hardness 30), and at column 5, lines 40-42 (noting

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SORBOTHANE brand elastomers of hardness 50, and 40), each with slightly variant chemical compositions. Note that shock absorbing members 68 secured to disk unit 12 via tang 40 for example, places the member between the side of the disk and the side of the disk accommodating part.

Regarding claim 15, the invention of *Hager et al.* teaches, at column 5, line 39, that the vibration/shock absorbing members are adhered to a member confronting the disk unit.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, 14/1, 14/4, 14/5, 14/6, 15/1, 15/4, 16/1, 16/4, 16/5, 16/6, 17/1, 17/4, 17/5, 17/6, 18, 19 and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Varghese et al.* in view of *Genix et al.* Regarding claims 1-4, 17, 18 and 24-29, the hard disk drive support apparatus 60 of *Varghese et al.* includes a plurality of vibration/shock absorbing members 70 between a disk unit 10 and a lid member 38 which covers a disk unit accommodating

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part 78 provided in a housing 12, all as shown in Figs. 1 and 4. In addition, there is a sheet member 62 provided between said disk unit and said vibration/shock absorbing members. It is also noted that since *Varghese et al.* includes two disk units, it literally satisfies the claim requirements that the sheet slides relative to the disk, since the *top* sheet of *Varghese et al.* slides relative to the *lower* disk.

Regarding claim 14, the invention of *Varghese et al.* also depicts that the vibration/shock absorbing members are between the disk and an inner top surface of the disk unit accommodating part (Figs. 3 and 4).

Regarding claim 16, the invention of *Varghese et al.* is a portable electronic apparatus.

Regarding claim 19, an alternate interpretation of the components comprising the invention of *Varghese et al.* is afforded via the Office's mandate that the Examiner give the claims the broadest reasonable interpretation consistent with the specification. Consistent with this mandate, the device of *Varghese et al.* alternately shows a disk drive accommodating part 78, a lid member 38 and a vibration/shock absorbing member 60 formed by a plurality of small pieces 70, and a sheet member 62.

What *Varghese et al.* does not teach is that the sheet member between the disk unit and the vibration/shock absorbing member be electrically insulative. The computer system with shock absorbing members of *Genix et al.* includes an electrically inherently insulative sheet 22 between the disk unit 18 and the vibration/shock absorbing member 20. PC boards are inherently electrically insulative by definition. See, for example, Microsoft Press Computer Dictionary

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which states that a printed circuit board is “a flat board made of *nonconducting material*, such as plastic or fiberglass, on which chips and other electronic components are mounted” (emphasis added). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the device of *Genix et al.* with the device of *Varghese et al.* to effect the claimed invention, especially in light of the express teaching of both references to provide shock and vibration isolation for computer disk drives, as well as the notoriously conventional nature of the kind of insulative sheets typified in the invention of *Genix et al.* Moreover, the design in *Genix et al.* expressly contemplates the work of *Varghese et al.*, as the former cites the latter.

### ***Response to Arguments***

Applicant's arguments filed September 29, 2000 have been fully considered but they are not persuasive.

With respect to applicant's remarks concerning the Hager et al. rejection, the examiner maintains that the reference teaches using separate shock absorbing materials simultaneously. The hardness for elements 64 and 68 which are used simultaneously is different and thus the materials are different. Element 68 is clearly a shock absorbing member and is mounted between the side of the disk drive and the side of the disk accommodating unit as described in the above rejection.

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With respect to applicant's remarks concerning the rejection of Varghese et al. in view of Genix et al., applicant states that a PC board is not electrically insulative. Please note the definition of a PC board now included in the above rejection which clearly states that a PC board is electrically insulative.

*Allowable Subject Matter*

5. Claims 10-13, 14/10, 14/12, 15/10, 15/12, 16/10, 16/12, 17/10, 17/12, 22, 23 and 31/22 are allowed.

*Conclusion*

6. All claims are drawn to the same invention claimed in the parent application prior to the filing of this Continued Prosecution Application under 37 CFR 1.53(d) and could have been finally rejected on the grounds and art of record in the next Office action. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing under 37 CFR 1.53(d). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

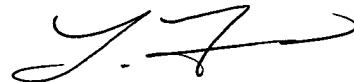
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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to L. Feild, whose telephone number is (703) 308-2710.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

The group fax number is (703) 305-3431,32.



**LYNN D. FEILD  
PRIMARY EXAMINER**

L. Feild  
Primary Examiner  
January 25, 2001